

# PATENT SPECIFICATION (11)

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(21) Application No. 2543/76

(22) Filed 22 Jan. 1976 (19)

(44) Complete Specification published 14 June 1978

(51) INT. CL.<sup>\*</sup> A63B 69/36

(52) Index at acceptance  
A6D 13A



## (54) A GOLF PRACTISING DEVICE

(71) I, WILLIAM CHESTERFIELD NEWTON, an Australian Citizen, of 49 Church Street, Middle Brighton, Victoria, Australia, do hereby declare the invention, for which I pray that a patent may be granted to me, and the method by which it is to be performed, to be particularly described in and by the following statement:—

This invention relates to a golf practising device wherein a captive ball is arranged to be struck by a golf club to rotate the ball about a pivot and actuate a recording means to indicate the distance the ball would have travelled if free to complete its flight.

The principal object of the present invention is to provide a golf practising device of the kind referred to of relatively simple construction which will be economical to produce commercially and will provide a readily readable indicated result of a practise stroke and with the indicator readily returnable to zero.

According to the invention, a golf practising device includes a base, a captive ball secured to a sleeve rotatable on a pillar fixed to the base, a cable winding drum rotatable by said sleeve upon the striking of the captive ball by a golf club, a cable anchored to the drum and to the free end of a tension member to provide resistance to the winding of the cable on the drum, and an indicator movable by the cable in a guideway in said base upon the cable being wound upon the drum, said indicator being arranged to remain in an indicating position after the cable has been unwound from the drum by the tension member. The indicator may be frictionally retained in the indicating position and may be manually returned to normal or zero position.

The anchorage of the cable to the winding drum is preferably arranged so that upon the tension member retracting and returning to normal the ball is automatically returned to the striking position.

The winding drum preferably forms part of the rotatable sleeve although it may be drive-coupled thereto.

In a convenient arrangement the ball is fixed to the free end of an arm integral with

the rotatable sleeve and the pillar is inclined, in use, from the vertical and the ball at the striking position is held above a surface on which the device stands at a height substantially that of a teed golf ball. The inclined plane of rotation will provide immediately after the ball has been struck a rising flight to the ball simulating that of a free ball struck from a tee.

In order that the invention may be readily understood reference will now be made to the accompanying drawings illustrating a golf practising device embodying the invention. In the drawings:

Fig. 1 is a perspective view of the practising device;

Fig. 2 is a part transverse sectional view of the device substantially at the mounting of the captive ball;

Fig. 3 is a section on line 3—3 of Fig. 2;

Fig. 4 is a detail section of the indicator and its mounting on the cable in the guideway; and

Figs. 5, 6 and 7 are sectional plan views of that portion of the base of the device carrying the cable winding drum, cable, indicator and tension member, the Figures respectively showing the parts in normal position, the cable wound upon the drum with the position assumed by the indicator, and the indicator in its indicating position after the tension member has unwound the cable on the drum and returned to normal position.

As illustrated the golf practising device comprises a base 8 of suitable rigid material, for example, metal or a rigid plastic moulded in any suitable manner. The base 8 is rectangular in plan and viewed transversely comprises two sections 9 and 10 extending for the length of the base, the front section 9 has a plane upper surface and the rear section 10 is a base section divided into two sections 11 and 12 by a partition 13, the section 11 being larger than section 12. The rear section 10 has a flange 14 extending the length of the rear section 10 and the base 15 of the flange 14 forms a foot on which the rear of the base 8 is adapted to be supported. The foot 15 and a forward portion 16 of the section 9 is arranged to support the section 10 and the front section

9 on a horizontal surface in an inclined manner for a purpose to be hereinafter described.

5 The upper surface of the forward section 9 has adhered or otherwise secured thereto a length of pile fabric 17 or other material to simulate a portion of turf to represent a green.

10 The upper surface or web forming the section 11 of the base section 10 is at its centre provided with an aperture 18, through which extends a pillar 19 having a screw-threaded central bore 20 into which a bolt 21 is screw-threaded to secure the pillar to a base web 22 of the section 11. Rotably mounted on the pillar 19 is a sleeve or base 23 which is retained on the pillar 19 by a head 24 formed on said pillar.

20 The sleeve 23, at the lower end thereof within the section 11, has formed thereon a peripheral recess 25 to form a cable winding drum and the upper outwardly extending portion of the sleeve 23 has integrally formed thereon an arm 26, the free end of which is cupped, as at 27, to receive portion of a captive ball 28 which is retained on the end of the arm 26 by a headed bolt 29 screwed into said arm. A nylon or like washer 30 is positioned about the pillar 19 between the lower surface of the sleeve 23 and the base web 22 of the section 11 to provide a reduced friction surface at the end of the sleeve 23 when it is rotated about the pillar 19.

35 The inclined arrangement of the sections 10 and 9 and the length of arm 26 is arranged so that said arm rotates about the pillar 19 in a plane inclined to the horizontal and the captive ball 28, when in the normal or striking position shown in Figs. 1 and 2, is positioned at tee height above the horizontal portion 17a of the green 17. With this arrangement the ball 28 upon being struck by a golf club at the tee position will, in commencing to rotate about the pillar, assume a rising flight, simulating that of a free flight ball, and conform with the follow-through motion of the club.

50 Attached to the winding drum 25, at one side thereof, is the end of a cable 31 which extends along the section 11 (as shown in Figs. 5, 6 and 7) around a return pulley 32 into the section 12 where the other end of the cable 31, at a point adjacent to the pillar 19, is anchored in a block 33 to the free end of a rubber tension member 34, the other end of which is anchored to the end wall of said section 12. The rubber tension member 34 may comprise a helical tension spring if desired.

60 The section 12 forms a guideway for an indicator member 35, which in plan is substantially of H formation, and is made of a suitable resilient plastics material so that arms 36 of the H form resilient members

frictionally engaging the walls of the section 12 whereby the member 35 will remain in any position it is placed in in said section. The indicator member 35 has a central aperture 37 through which the cable 31 freely passes and the arrangement is such that upon the cable 31 being wound upon the winding drum 25, against the resistance of the tension member 34, the block 33 moves the indicator member 35 along the section 12 according to the distance the tension member is extended by the winding of the cable on the drum.

80 The upper wall of the guideway or section 12 is slotted, at 38, and through this slot a pointer 39, forming part of the member 35, extends to register with suitable indicia marked along the slot 38. Fig. 5 shows the winding drum 25, the cable 31, the tension member 34 and the indicator member 35 in their normal positions, Fig. 6 shows the cable 31 wound upon the drum 25, the tension member 34 extended and the indicator member 35 moved by the member 34 along the guideway and Fig. 7 shows the drum 25, the cable 31 and the tension member 34 returned to normal leaving the indicator member 34 in the registering position from which it may be manually returned to zero or normal position for the next practice shot.

95 It will be apparent that the embodiment above described requires no modification for right or left handed players as the winding of the cable on the drum to operate the indicator operates irrespective of the direction in which the drum is rotated, that is in the case of a right handed player the captive ball is rotated clockwise and in the case of a left handed player it is rotated anti-clockwise.

105 Furthermore in the embodiment described the cable winding drum 25 is formed integrally with the sleeve 23 supporting the captive ball for simplicity in construction, however, if desired the winding drum may be separate and drive-coupled to the sleeve by gears or like drive means.

#### WHAT I CLAIM IS:—

1. A golf practising device including a 115 base, a captive ball secured to a sleeve rotatable on a pillar fixed to the base, a cable winding drum rotatable by said sleeve upon the striking of the captive ball by a golf club, a cable anchored to the drum and to the free end of a tension member to provide resistance to the winding of the cable on the drum and an indicator movable by the cable in a guideway in said base upon the cable being wound upon the drum, said indicator being arranged to remain in an indicating position after the cable has been unwound from the drum by the tension member.

2. A golf practising device as claimed 130

in claim 1 wherein the indicator frictionally engages the guideway to be retained in an indicating position and is manually returnable to normal or zero position.

- 5 3. A golf practising device as claimed in claim 1 or 2 wherein the anchorage of the cable to the winding drum is arranged so that upon the tension member retracting and returning to normal the ball is automatically  
10 returned to a striking position.

4. A golf practising device as claimed in any of the preceding claims wherein the winding drum forms part of the rotatable sleeve.

- 15 5. A golf practising device as claimed in any of the preceding claims wherein the ball is fixed to the free end of an arm integral with the rotatable sleeve and the pillar is, in use, inclined from the vertical and the ball at the striking position is held  
20 above a surface in which the device stands at a height substantially that of a teed golf ball.

- 25 8. A golf practising device as claimed in any of the preceding claims wherein the base is rectangular in plan and comprises front and rear sections extending the length of the base, the front section supporting a material simulating a green and the rear section comprising two base sections of  
30 which one includes a mounting for the pillar and an aperture for the sleeve thereon to project there-through, the other base section comprising a guideway for the indicator and a housing for the tension member.

- 35 7. A golf practising device as claimed in claim 4 and 6 wherein the pillar is bolted to the floor of the first base section and has

a head thereon to retain thereon the rotatable sleeve supporting the captive ball.

8. A golf practising device as claimed  
40 in claim 7 wherein one end of the cable is anchored at one side of the winding drum and extends along the first base section over a return pulley into the second base section where it is secured to a block on one end  
45 of the tension member which is anchored at its other end in said second base section.

9. A golf practising device as claimed in claim 8 wherein the indicator has an aperture therein through which the cable passes  
50 and said indicator has a resilient arm or arms thereon to frictionally engage a side or sides of the second base section forming the guideway for the indicator.

10. A golf practising device as claimed  
55 in any one of claims 6 to 9 wherein the upper wall of the second base section is slotted to enable a pointer on the indicator to register with indicia adjacent said slot.

11. A golf practising device as claimed in claims 8 and 10 wherein the block on the end of the tension member is arranged, when  
60 the tension member is extended, to move the indicator along its guideway to indicate the amount of extension imparted to the tension member.

11. A golf practising device constructed and arranged to operate substantially as  
65 herein described and with reference to the accompanying drawings.

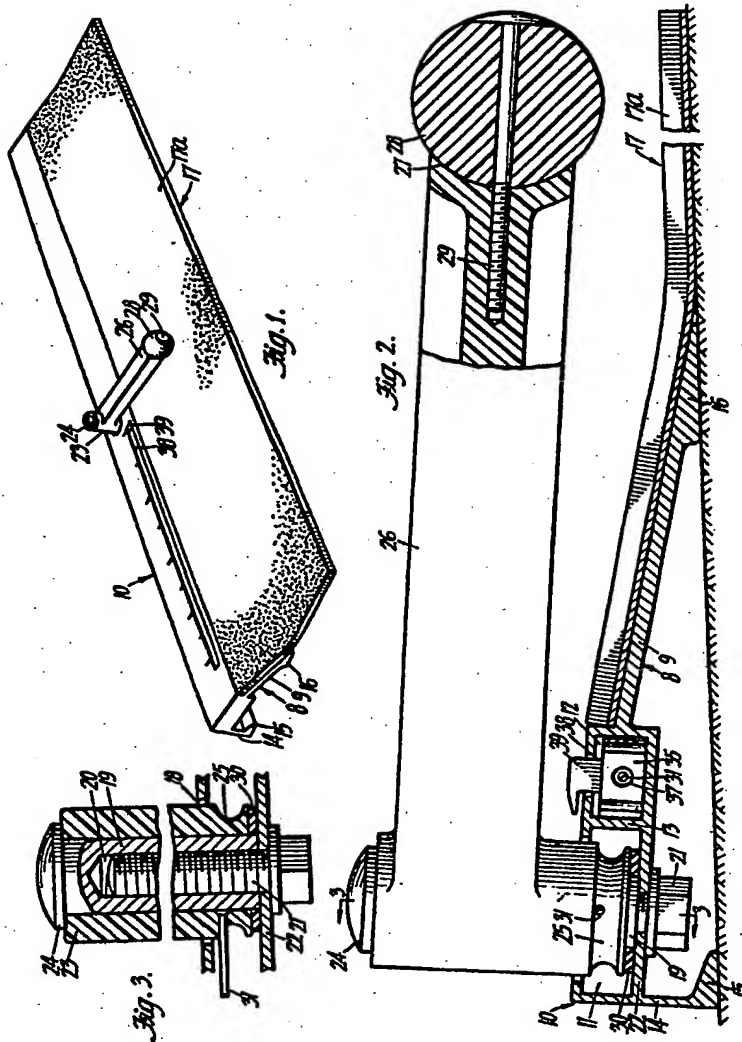
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COMPLETE SPECIFICATION

2 SHEETS

This drawing is a reproduction of  
the Original on a reduced scale  
Sheet 1



**This drawing is a reproduction of  
the Original on a reduced scale  
Sheet 2**

